

## **Budget Justification/Narrative** (Please do not just plug in your numbers!)

### **Overall Institutional IPM Program**

This top section should look like any other Budget Narrative section. Budget numbers from the lower, component budget section must match the upper section (additively). This example is ONLY an example. Something like this would be appropriate.

The IPM program at XYZ Tech University is a thing of beauty and all clients and residents of the state benefit from our work. Success of the program is dependent on the capacity provided through federal funding.

Budget Justification for Dr. Buzz Lightyear, IPM Coordinator:

#### **A. Senior/Key Personnel**

Wage and fringe for Dr Lightyear (12 month period):	\$ 80,000
Percent effort on project: 3 month, 0.25 FTE =	
<b>Requested amount.....</b>	<b>\$ 20,000</b>
Salary for IPM Coordinator (0.25 FTE).....	\$ 15,000
Fringe benefits.....	\$ 5,000

#### **B. Other Personnel**

Wage and fringe for Extension area educators (12 month period):	\$ 30,000
Research technician, effort on project for 42 month period: 3.5 FTE=	
<b>Requested amount.....</b>	<b>\$140,000</b>
Agronomic IPM	
Salary for IPM Educators (3.0 FTE).....	\$ 90,000
Fringe benefits.....	\$ 30,000
IPM on recreational lands	
Salary for IPM Educator (0.5 FTE).....	\$ 15,000
Fringe benefits.....	\$ 5,000
Hourly workers for Conservation IPM	
<b>Local science teachers hired hourly (\$ 8/hr x 600 hrs)....</b>	<b>\$ 4,800</b>
<b>Subtotal.....</b>	<b>\$164,800</b>

#### **C. Equipment: none**

#### **D. Travel (to training and program delivery sites):**

1. Domestic	\$ 25,208
Travel to multistate committee meeting fro <b>Agronomic Crop IPM</b>	\$ 1,200
Program planning and travel costs for Stakeholder Advisory panel	\$ 3,000
Travel to bi-state program planning meeting at XYZ Tech.....	\$ 800
In-state travel for <b>Agronomic Crop IPM</b> .....	\$ 3,000
7 trips to day camp X 150 miles/ea X 2 vehicles @ \$0.46/mi.....	\$ 2,208
<b>Conservation</b> Train the trainer travel costs .....	\$ 1,000
Conservation IPM In-state travel .....	\$ 8,000
<i>Consumer/Urban IPM</i> Train the trainer travel costs .....	\$ 3,000
<b>School IPM</b> Train the trainer travel costs .....	\$ 3,000
<b>Subtotal.....</b>	<b>\$ 26,208</b>

2. Foreign (none)

E. Participant Trainee Support Costs (none)

F. List of material and supplies and cost:

1. Purchase resin to mount mosquitoes and mosquito suit..... \$ 1,400
2. Publication costs..... \$ 1,000
3. Consultant Services (none)
4. Computer services (none)
5. Subawards (none in this example – will be paid by host institution)
6. Equipment Facility Rental
7. Alterations and renovations (none)

Subtotal..... \$ 2,400

G. Contractual Services

Print and Design..... \$ 19,392

Includes Agronomic Crops IPM Materials development and printing, development costs for **conservation IPM** training materials, development costs for Consumer IPM training materials, print materials for IPM in Pests and Vectors of Human Disease, and development costs for **School IPM** training materials.

Sample processing at the state biochemistry laboratory..... \$ 19,600

Host 4 **conservation** workshops with Extension/NRCS field staff ..\$ 3,000

**School IPM** survey development, validation and mailing .....\$ 4,000

Subtotal..... \$ 45,992

H. Indirect costs and rate: None

Through these funds we are able to reach our clients and advance the goals of IPM as defined in the National IPM Roadmap. The specific allocation of our request is as follows:

### Coordination Component

Our coordination program will address coordination of IPM efforts at XYZ Tech University to include planning and coordinating IPM outreach efforts across the university. We will specifically host quarterly IPM committee meeting at the university to plot strategic directions for the programs and coordinate program content and major program thrust for the time period. This planning will be done with the input from a Stakeholder Advisory panel that will help identify major areas to target for improvement. We will deliver these programs to our stakeholder groups with a coordinated effort including our entire IPM team including county-based field educators.

Annually we will participate in the Multistate IPM Committee to build community and develop potential for shared programming that reaches beyond the direct influence of XYZ Tech University.

Salary for IPM Coordinator (0.25 FTE)..... \$ 15,000

Fringe benefits..... \$ 5,000

Travel to multistate committee meeting..... \$ 1,200

Program planning and travel costs for Stakeholder Advisory panel . \$ 3,000

**Subtotal ..... \$ 24,200**

### **Collaboration Component**

We have arranged an agreement with 123 A&M University (see letter of collaboration, attached) to deliver the recreational lands program designed below. Print and design facilities will be used at 123 and two additional sites will be located on lands generally programmed by 123 A&M.

Print and Design.....	\$ 10,000
Travel to bi-state program planning meeting at XYZ Tech.....	\$ 800
Additional sample processing at the XYZ biochemistry laboratory.	\$ 4,800
Local science teachers hired hourly (\$ 8/hr x 200 hrs).....	\$ 1,600
<b>Subtotal .....</b>	<b>\$ 17,200</b>

### **Areas of Emphasis**

#### **1. *IPM in Agronomic Crops*..... \$ 125,000**

Agronomic crops are significant in our state. This is the primary focus of three regional IPM educators stationed across the state. Wheat, corn and sorghum provide about 80% of the gross farm income in a state where agriculture is the number one industry. Farm gate income approaches \$ 3.2 billion each year, in large part from these main crops. Pest management costs account for about 40% of the inputs for these crops, especially weed control. Locally supported educators will design and deliver on-farm research-based demonstration to show comparatively the advantage of pest monitoring and targeted application efforts in the tradition of Seaman Knapp.

Salary for IPM Educators (3.0 FTE).....	\$ 90,000
Fringe benefits.....	\$ 30,000
Materials development and (on-demand) printing.....	\$ 2,000
In-state travel .....	\$ 3,000
<b>Subtotal .....</b>	<b>\$125,000</b>

We will be participating in collaboration hosted by LMNOP State University to deliver our corn IPM programs through the contiguous Wetandep River Valley. The Wetandep Valley is the most productive land in both states and deployment of a common IPM program is to the benefit of producers on both sides of the border. Migratory lepidopterans are a common problem for corn produced in the Valley and the cool, heavy Valley soils favor root diseases. A coordinated effort will favor producers in both states. The popcorn and blue corn for human consumption are particularly prone to disease under the irrigated production practices that are becoming prevalent. LMNOP State will provide primary entomology support for this project while XYZ Tech will provide plant pathology and weed science expertise. The collaboration proposal for this Area of Emphasis is included in the LMNOP State University application. The contribution from XYZ Tech will include authorship in a new electronic newsletter that will target producers on both sides of the border and participation in field days in both states. Six field days are planned. A letter of collaboration from the Extension Director at XYZ Tech is included in the LMNOP State application and copied in the appendix of this application.

#### **2. *IPM in High Value, High Input or Intensively Managed Crops*..... \$ 0**

We will not participate in a program in this emphasis area.

#### **3. *IPM Coordination within Conservation Partnerships*..... \$ 5,000**

A pilot program will be launched in the Big Muddy watershed to encourage IPM adoption in conservation tillage programs. Cool soils with heavy residue are seeing an increase in root disease. A program to help identify specific root pathogens and assist producers in choosing the correct cultivars with appropriate resistance to the prevalent pathotypes will be launched. Three local conservation districts have agreed to participate and the state conservationist has provided a letter stating that he supports the concept of additional training for his staff and looks forward to working together with XYZ Tech Extension to increase the adoption of the 596 Pest Management standard in the local EQIP programs and principles of IPM behind the standard. Federal statute prohibits the State NRCS office for issuing a letter of collaboration, but they have agreed to support the concept of the joint project.

Develop training materials .....	\$ 1,000
Host 4 workshops with Extension/NRCS field staff.....	\$ 3,000
Train the trainer travel costs .....	\$ 1,000
<b>Subtotal .....</b>	<b>\$ 5,000</b>

- 4. IPM Support for Pest Diagnostic Facilities..... \$ 0**  
The diagnostic facilities at XYZ Tech University are excellent and do not need additional support.

- 5. IPM in Schools ..... \$ 10,000**

We have initiated a program to launch an IPM in Schools program that will focus on management of indoor pests in school buildings. Many of the states schools are aging and pests are common in those facilities. Rising cockroach populations are increasing the risk of allergy related asthma in the educational environment. The XYZ Tech University IPM program will initiate a training program for school custodial staff, pest control specialists and teachers to raise awareness and minimize the risk to students. Training sessions will be conducted in 15 school districts with problem facilities and a follow up survey will be distributed at training and again six, nine, 12 and 24 months after training. A short monthly school IPM newsletter will be initiated to keep IPM in the front of the minds of workshop attendees.

Develop training materials.....	\$ 3,000
Survey development, validation and mailing .....	\$ 4,000
Train the trainer travel costs .....	\$ 3,000
<b>Subtotal .....</b>	<b>\$ 10,000</b>

- 6. IPM in Housing ..... \$ 0**  
We will not participate in an IPM in housing program.

- 7. IPM on Recreational Lands ..... \$ 50,000**

An outgrowth of the School IPM program is a program to launch an IPM on school athletic fields program. This pilot effort in four school districts of varying size, one in each of the states athletic classes, is set to compare the cost savings and reduced exposures of student athletes and adjacent watersheds to pesticide inputs. Each participating school will be contrasted with a comparable facility that is not implementing IPM. Surface water will be sampled on a weekly schedule at three locations downstream from the test sites. Each sample will be tested by HPLC for 10 common pesticides as well as nitrogen and phosphorus runoff. Data will be compared across locations and will be used in programs during winter training. In-state travel is complicated by the distance and the weekly frequency. Local science teachers have been enlisted to assist with water sample collection. This may increase local support and allow a local story to

be told in classroom and to PTA Boards. The PI has already accepted three invitations to report back to a school board, PTA and Rotary club about the effects of the program locally.

Salary for IPM Educators (0.5 FTE).....	\$ 15,000
Fringe benefits.....	\$ 5,000
Sample processing at the state biochemistry laboratory.....	\$ 18,800
Local science teachers hired hourly (\$ 8/hr x 400 hrs).....	\$ 3,200
In-state travel .....	\$ 8,000
<b>Subtotal .....</b>	<b>\$ 50,000</b>

Please note the collaboration component associated with this IPM in recreational lands project (above).

**8. Consumer/Urban IPM ..... \$ 5,000**

We will work with the five county-based consumer horticulture program educators and provide teaching materials for non-chemical pest control in the home garden, focusing on crop rotation, soil solarization and natural remedies to common garden pests.

Develop training materials.....	\$ 2,000
Train the trainer travel costs.....	\$ 3,000
<b>Subtotal .....</b>	<b>\$ 5,000</b>

**9. IPM for Pests of Humans and Vectors of Disease ..... \$ 5,000**

We will provide materials and conduct training on West Nile Virus and protection from mosquitoes at 4-H day camps (target audience: 7-10 yr-olds). Sessions will include appearances by 'Stripe' the Asian Tiger mosquito (A mosquito costume worn by a project technician). 'Stripe' has proven to be a well received ambassador for vector control and holds the students attention very well. We anticipate seven sessions with about 500 youth contacts.

7 trips to day camp X 150 miles/ea X 2 vehicles @ \$0.46/mi.....	\$ 2208
Purchase resin to mount mosquitoes.....	\$ 400
Purchase of custom Mosquito suit (one time cost).....	\$ 1000
Print materials @ \$2.78/ea X 500 participants .....	\$ 1392
<b>Subtotal .....</b>	<b>\$ 5,000</b>

**10. IPM Partnerships in Wide-Area Pest Monitoring & Reporting Systems..... \$ 0**

We will not participate in any wide area IPM Program.

**Total program costs..... \$ 241,400**